

PATENT SPECIFICATION

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(54) IMPROVEMENTS IN AND RELATING TO DRAWERS
AND DRAWER COMPONENTS

(71) We, L.B. (PLASTICS) Limited of Firs Works, Nether Heage, Belper, Derbyshire, do hereby declare the invention, for which we pray that a patent may be granted 5 to us, and the method by which it is to be performed, to be particularly described in and by the following statement:—

The invention relates to drawers and to parts and components thereof. The invention 10 is particularly concerned with so called "knock-down" drawers of plastic construction comprising hollow extruded wall panels having slots therein for accommodation of the drawer floor and adapted to be interconnected at right angles to one another by connecting pieces having projecting spigots engageable in the ends of the wall panels. The invention is however also applicable to other forms of drawer.

20 Drawers are conventionally mounted either on fixed runners or on roller runners. The former provide a simple means of mounting drawers in cabinets or the like but suffer from the disadvantage that relatively high friction forces are present between the drawer and the runners and drawers mounted in this way are not generally suitable for carrying heavy loads. Roller runner assemblies, though 25 more complicated, eliminate or reduce friction between the drawer and its runners, thereby enabling greater loads to be carried.

A disadvantage of roller runner assemblies 30 is that separate guide or runner members require to be mounted both in the supporting cabinet and on the drawer itself in order to accommodate the roller assembly between them and the extent to which such runner assemblies project from the opposite sides of the drawer reduces the overall width of 35 a drawer which can be accommodated in a cabinet having an opening of a predetermined size. Additionally the working parts of the roller assembly itself are liable to become fouled by dirt and other foreign matter which can cause malfunctioning.

40 It is an object of the present invention to obviate or mitigate these disadvantages.

According to the invention there is pro-

vided a drawer wall panel of hollow extruded plastics construction having a channel formed integrally therewith during extrusion and extending lengthwise of the face of the panel which is outermost in use, the channel being inset into the panel and having upper and lower longitudinally-extending flanges which project across the entrance to the channel from the opposite longitudinal edges thereof to partially close said entrance, the outer surfaces of said flanges being flush with the outer face of the panel.

Preferably the wall panel is provided with apertures adjacent its opposite ends for engagement by dentents carried on projecting spigot portions of connecting members adapted for engagement in the hollow ends of the panel to attach the panel to adjacent wall panels to form a drawer.

The invention also provides a drawer assembly comprising a drawer at least the opposed side walls of which are formed 50 from wall panels according to either of the preceding paragraphs and including a guide and bearing member located within each channel and operatively associated with a drawer runner, said guide and bearing member being moveable longitudinally of said channel but being retained against lateral withdrawal therefrom by said longitudinally extending flanges.

One form of guide and bearing member 55 comprises a body member having bearing means projecting from the upper surface thereof and incorporating locking means operable to lock on to said drawer runner automatically following engagement between the drawer and the runner and closing movement of the drawer.

Preferably also each guide and bearing member is carried by the forward end of the associated runner, a rear guide and bearing member being provided at the rear end of each channel for sliding engagement with the associated runner to support and guide the rear end of the drawer during opening and closing movement thereof.

Advantageously each of said channels

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is adapted to receive any one of a plurality of interchangeable drawer runners of different form, there being a plurality of alternatively useable guide and bearing members 5 adapted to slidably support and guide the rear end of the drawer on the respective form of runner.

Embodiments of the invention will now be described, by way of example only, with reference to the accompanying drawings in which:

Fig. 1 is an exploded perspective view showing part of one form of drawer and runner construction incorporating features 15 of the invention and comprises Figs. 1A to 1G;

Fig. 1A is a perspective view of a drawer side panel;

Fig. 1B is a perspective view of a guide 20 and bearing member adapted for sliding engagement in a track formed in the drawer panel shown in Fig. 1A;

Fig. 1C is a perspective view of a drawer runner;

Fig. 1D is a perspective view of a corner connector used in connecting the drawer back and side panels;

Fig. 1E is a scrap view showing a modification of the corner connector shown in 30 Fig. 1D;

Fig. 1F is a perspective view of a front connector for use in connecting the side panel to the drawer front;

Fig. 1G is a perspective view of drawer 35 side panel of larger size than that shown in Fig. 1A;

Fig. 2 is an enlarged perspective view of the guide and bearing member shown in Fig. 1B;

Fig. 3 is a perspective view of a modified 40 construction comprising a modified drawer runner shown in Fig. 3A and a modified corner construction shown in Fig. 3B;

Fig. 4 is an exploded perspective view of 45 modified forms of drawer and runner construction incorporating features of the invention and comprises Figs. 4A to 4L;

Fig. 4A is a perspective view of a drawer side panel;

Fig. 4B is a perspective view of a guide and 50 bearing member adapted to be received in a track formed in the drawer panel shown in Fig. 4A;

Fig. 4C shows one form of runner on which the drawer construction may be mounted;

Fig. 4D shows a corner connector for use in connecting the drawer back and side panels;

Fig. 4E is a perspective view showing the 60 internal construction of the corner connector shown in Fig. 4D;

Fig. 4F is a perspective view showing one 65 form of removable fitment used in association with the corner connector shown in Figs. 4D and 4E and the runner shown in Fig. 4C;

Fig. 4G is a perspective view of a front connector for use in connecting the drawer side panel to the drawer front;

Fig. 4H is a perspective view showing the internal construction of the front connector 70 shown in Fig. 4G;

Fig. 4J shows a fitment for use in assisting closing of the drawer;

Fig. 4K is a perspective view of an alternative form of runner on which the drawer 75 may be mounted;

Fig. 4L is a perspective view of an alternative fitment for use in association with the corner connector shown in Figs. 4D and 4E and the runner shown in Fig. 4K;

Fig. 5 is a fragmentary perspective view of a drawer and runner constructed from the components shown in Figs. 4A to 4H; and

Fig. 6 is a fragmentary perspective view of a drawer and runner constructed from the components shown in Figs. 4A, 4D, 4E, 4G 85 4H, 4K and 4L.

The drawer constructions shown in the drawings are of so called "knock-down" construction, the sides and back comprising identical extruded hollow panels interconnected at right angles to one another by corner pieces. The forward ends of the side panels are connected to the drawer front by means of end connectors, and inwardly directed slots are provided adjacent the lower edges of the panels to receive the edges of a drawer bottom.

Figs. 1A and 1G shows two alternative sizes of side panel 5A and 5B both of extruded plastics construction and of hollow section. The corner pieces 3 by means of which the side and back panels are interconnected are shown in Fig. 1D and the end connectors 4 serving to connect the drawer sides to a suitable facia panel are shown in Fig. 1F.

The drawer panel 5A shown in Fig. 1A comprises upper, intermediate and lower hollow sections 6A, 6B and 6C separated by internal webs 7. The larger side panel 5B 110 shown in Fig. 1G incorporates an additional intermediate section 6B but is otherwise of similar construction. An inwardly directed recess 8 is formed adjacent the lower longitudinal edge of the panel to accommodate 115 an edge of a drawer bottom (not shown). The lower hollow section 6C of the panel incorporates a longitudinal channel 9 the entrance to which comprises a narrow slot 10 defined between upper and lower 120 longitudinal lips or flanges 11A, 11B extending across the channel 9 towards one another so as to partially enclose same. The channel 9 constitutes an integral runner track designed to accommodate a guide and bearing assembly member 14 (Fig. 1B).

The guide and bearing member is shown in greater detail in Fig. 2 and comprises a body portion or carriage 15 formed with a through track or slot 16 and surmounted by a rotata- 130

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ble roller 17. A curved leaf spring 18 is located in the bottom of the track 16 between inturned lips 18A, and a further curved leaf spring 19 engages with the portion of the body 15 defining the back or inner wall of the recess 16 so as to project therefrom in the opposite direction from the recess. Pips 15A project from the faces of the body portion which engage the lips 11A, 11B of the track 9 to reduce frictional contact. Similar pips (not shown) are provided on the underside of the body portion.

In use the guide and bearing member is located in the track 9 with the roller 17 uppermost and the recess or slot 16 in alignment with the narrow entrance 10 to the track 9. The member is retained in the track by the lips 11A, 11B and by the corner piece 3 and front connector 4 which are located in the ends of the drawer panel when the drawer is assembled.

The guide and bearing member is adapted for engagement with a fixed drawer runner 20 (Fig. 1C) of angle form and L-shaped cross-section having a mounting flange 21 by means of which the runner may be mounted in a suitable position in a cabinet or like housing in which the drawer is to be slidably located, and a drawer-engaging flange 22 which projects at right angles from the securing flange and is adapted to extend into the channel 9 for locking engagement with the guide and bearing member. For this purpose a notch 23 is formed adjacent the forward end of the drawer-engaging flange 22 and is adapted to engage with the guide and bearing member to retain same in a fixed position on the runner 20. A downwardly directed projection 25 is formed on the upper surface of the slot 16 in the guide and bearing member and engages with the notch 23 in the runner 20, engagement being maintained by virtue of the spring 18 urging the guide and bearing member downwardly and thereby retaining the projection 25 in the notch.

The spring 19 serves to urge the guide and bearing member bodily away from the back or inner wall of the track 9 and accommodates for differences in tolerance of the drawer components introduced during manufacture by allowing the guide and bearing member to adopt different positions in the track 9 dependent on the extent to which the runner flange 22 extends into the track.

The corner pieces 3 (Fig. 1D) each comprise an upstanding corner post 30 having spigot members 31 projecting therefrom at right angles and spaced and dimensioned so as to form a tight push fit in the upper, intermediate and lower cavities of the associated wall panels. Detents 32 are provided on the two uppermost projections 31 and engage in holes 33 formed in the outer face of the wall panel adjacent to the end thereof. Towards its lower end the post 30 is provided

with a through slot 34 for accommodation of the flange 22 of the runner 20. Opposed curved bearing surfaces 35A, 35B are formed at the recess 34 to facilitate sliding movement and reduce wear. If desired these bearing surfaces may be replaced by separate inserts 36A, 36B of wear-resistant material as shown in Fig. 1E. Alternatively a roller or rollers could be incorporated. The slot 34 thus provides a guide and bearing member for supporting the rear end of the drawer during sliding movement.

The front connecting member 4 (Fig. 1F) comprises a face plate 40 provided with spigot members 41 similar to the spigots or projections 31 formed on the corner connectors 3 and adapted for engagement in the hollow ends of the associated side wall panel. Prior to insertion of the front connectors into the wall panel they are secured to a suitable facia panel by screws passed through holes 42 in the face plate 40, whereupon the assembly comprising the facia panel and the two front connectors is engaged with the open forward ends of the side panels, the drawer bottom having been inserted in the meantime.

In use, the drawer is supplied to the customer in disassembled condition and is erected by inserting the corner pieces 3 in the open ends of the side and back panels thereby joining same together at right angles to one another. Thereafter the guide and bearing members 14 may be inserted in the tracks 9 in the side walls and the drawer bottom engaged in the slots 8. The front connectors 4 are then secured to the facia panel in suitable positions corresponding to the spacing of the drawer sides and the assembly comprising the facia panel and the front connectors is then engaged with the remainder of the drawer by pushing the front connectors into the hollow ends of the side wall panels. The guide and bearing members are then trapped within the tracks 9 at opposite sides of the drawer but are free to slide longitudinally thereof.

The drawer may then be inserted in the cabinet or the like in which it is to be housed and which is first of all provided with opposed runners of the kind shown in Fig. 1C. The drawer may be engaged with the runners by simply pushing it into the opening in the cabinet to its fully closed position in which the projections 25 on the guide and bearing members reach the notches 23 in the respective runners. The guide and bearing members then lock on to the associated runners and are retained in position, the drawer being free to slide along the runners between the limits defined by engagement of the guide and bearing members with the corner pieces and front mouldings which are disposed at opposite ends of the tracks 9. If it is desired to release the drawer from the

cabinet the springs 18 are depressed by lifting the front of the drawer, thereby allowing the guide and bearing members to be disengaged from the slots 23 whereupon the drawer 5 can be drawn completely out of the cabinet.

It will be appreciated that the arrangement described provides a drawer construction at least partially mounted on roller runner assemblies which is of simple and compact 10 construction. By virtue of the provision of the channels or tracks within the dimensions of the side panels themselves, the overall width of the drawer which can be accommodated in an opening of a given size is increased 15 compared with similar drawers utilising conventional roller runner assemblies. The moving parts are also wholly enclosed within the drawer panels themselves and thereby protected from damage.

20 Fig. 3 shows a modification enabling the drawer to be used with a fixed runner system. For this purpose the runner 20 shown in Fig. 1C is replaced by an alternative runner 45 shown in Fig. 3A having a vertical or mounting flange 46 enabling the runner to be attached to a drawer cabinet or the like in a suitable position, and a horizontal or drawer-engaging flange 47 which, in use, extends into the track 9 through the narrow entrance slot 30. The runner also incorporates a supporting and guiding flange 48 extending at right angles to the flange 47 and providing an upwardly bearing surface on which the drawer runs. In use the flange 48 is trapped within the 35 track 9 in the drawer side thereby retaining the drawer against lateral movement and providing a bearing surface on which the drawer may run.

A modified form of corner connector 49 40 (Fig. 3B) is utilised in association with the runner 45. This connector is generally similar to that shown at 3 in Fig. 1D but incorporates a generally T-shaped recess 50 to accommodate the flange 48 as the drawer 45 slides along the runner. In other respects the corner piece is constructed and functions in the same manner as that described with reference to Fig. 1D.

The drawer assembly may thus be utilised 50 in association with either fixed or roller runners without requiring any modification of the drawer itself other than the substitution of the modified form of corner connector. In practice the connector shown in Fig. 3B will 55 normally be utilised so that the drawer may be used with fixed or roller runners without modification. Alternatively different forms of insert of the kind shown in Fig. 1E could be provided to enable conversion 60 from one form to the other.

Figs. 4 to 6 shows modifications of the arrangements shown in Figs. 1 to 3 and wherever possible similar parts are designated by similar reference numbers increased by 100.

65 Referring to Fig. 4 a side panel is shown at

105, a corner piece at 103 and an end connector for connecting the drawer side to a suitable facia panel at 104. The drawer panel 105 (Fig. 4A) comprises upper, intermediate and lower hollow sections 106A, 106B and 70 106C separated by internal webs 106D. An inwardly directed recess 108 is formed in the hollow section 106C adjacent the lower longitudinal edge of the panel to accommodate an edge of a drawer bottom (not shown). The lower hollow section 106C of the panel also incorporates a longitudinal channel 109 the entrance to which is narrower than the channel itself and comprises a slot 110 defined between upper and lower longitudinal lips or flanges 111A, 111B extending across the channel 109 towards one another so as to partially close same. The channel 109 constitutes an integral runner track designed to accommodate a guide and bearing member. 80

One form of guide and bearing member 114 which may be accommodated in the channel 109 is shown in Fig. 4B and comprises a body portion 115 formed with a through track or slot 116 and surmounted by a pair of rotatable wheels or rollers 117. A curved leaf spring 118 is located in the bottom of the track 116 between inturned lips 118A. Pips 115A project from the faces of the body portion which engage the lips 111A, 111B of the track 109 to reduce frictional contact. Similar pips are provided on the underside of the body portion. 90

In use the guide and bearing member is 100 located in the track 109 with the rollers 117 uppermost and the recess or slot 116 in alignment with the entrance slot 110 to the track 109. The roller assembly is retained in the track by the lips 111A, 111B and by 105 the corner piece 103 and front connector 104 which are located in the ends of the drawer panel when the drawer is assembled.

It should be noted that the extents to which the lips 111A and 111B extend 110 across the channel 109 differ slightly. This is designed to ensure that the guide and bearing member 114 cannot be inserted into the channel upside down.

The guide and bearing member 114 is 115 adapted for engagement with a drawer runner 120 shown in Fig. 4C which is of angle form and L-shaped cross-section having a securing flange 121 by means of which the runner may be mounted in a suitable 120 position in a cabinet or like housing in which the drawer is to be slidably located. The runner also has a drawer-engaging flange 122 which projects at right angles from the securing flange and is adapted to 125 extend into the channel 109 for locking engagement with the guide and bearing member. For this purpose a notch 123 is formed adjacent the forward end of the drawer-engaging flange 122 and is adapted 130.

to engage with the guide and bearing member to retain same in a fixed position on the runner 120. A downwardly directed projection 125 is formed on the upper surface of the 5 slot 116 in the guide and bearing member and engages with the notch 123 in the runner 120, engagement being maintained by virtue of the spring 118 urging the guide and bearing member downwardly and thereby retaining 10 the projection 125 in the notch. A similar arrangement is of course provided at the other side of the drawer.

The corner pieces 103 (Fig. 4D) each comprise an upstanding corner post 130 having 15 spigot members 131 projecting therefrom at right angles and spaced and dimensioned so as to form a tight push fit in the upper, intermediate and lower cavities of the associated wall panels. Detents 132 are provided on the projections 131 and engage 20 in holes 133 formed in the outer face of the wall panel adjacent to the end thereof. Towards its lower end the post 130 is provided with a through opening 134 for accommodation of an insert 135 which co-operates 25 with the runner 120 in use.

The insert 135 comprises a locking part 136 and a bearing or body part 137. The insert is located in the opening 134 in the 30 corner post 130 after the drawer has been assembled and the locking part 136 extends beyond the corner post into the channel 109. A detent (not shown) similar to the detent 132 is provided on the surface of the locking 35 part 136 which locates against the back or inner wall of the channel 109 for engagement with a hole 138 provided therein. The body part 137 incorporates a pair of rollers 138 which are spaced apart sufficiently to accommodate the flange 122 of the runner 120 and provide opposed bearing surfaces therefor. The rollers could alternatively be replaced by fixed bearing surfaces of the kind incorporated in the alternative insert to be described 40 hereafter. The body or bearing part 137 thus provides a guide and bearing member for supporting the rear end of the drawer during 45 sliding movement.

When the insert is in position it closes the 50 rear end of the channel 109 and prevents withdrawal of the front guide and bearing member 114. A spring tongue 139 is bent outwardly from the back wall of the locking part 136 of the insert and serves as a spring 55 to reduce side movement. This accommodates differences in tolerance of the drawer components introduced during manufacture and can be used alone or in conjunction with a spring of the kind shown at 19 in Fig. 2.

60 It will be noted that the corner connectors serve a number of functions. Firstly they serve to interconnect the side and back wall panels at right angles to one another. Secondly they incorporate supporting and guiding 65 means for the rear of the drawer during its

movement along the runners. Thirdly they provide end stops serving to limit the extent to which the drawer can be drawn out of the cabinet.

Each of the front connecting members 104 (Fig. 4G) comprises a face plate 140 provided with spigot members 141, similar to the spigots or projections 131 formed on the corner connectors 103, and adapted for engagement in the hollow end of the associated side wall panel. Prior to insertion of the front connectors into the respective wall panels the front connectors are secured to a suitable facia panel by screws passed through holes 142 in the face plates 140, whereupon the assembly comprising the facia panel and the two front connectors is engaged with the open forward ends of the side wall panels, the drawer bottom having been inserted in the meantime.

A raised rim 140A is provided round the peripheral edge of the face plate 140. This provides a slight clearance between the surface of the face plate and the surface of the drawer front to which it is attached so that the face plate contacts the drawer front at all points on its periphery despite any slight surface irregularities on the drawer front. The clearance provided at the central region of the face plate also accommodates material displaced from the drawer front in the region of the screw holes when the front connecting member is secured in position.

It should be noted that the detents provided on the corner and facia connectors 100 and on the corner connector inserts are of D-shape and slope upwardly from their narrow to their wider ends. This is advantageous in providing a gradual increase in resistance both due to the increasing dimension of the D-form from the point towards the base and due to the sloping formation. Detents of this form do not present undue resistance to interconnection of the components but at the same time provide a secure connection when engaged.

The construction of the corner pieces 103 and front connecting members 104 is such that they cannot be wrongly inserted in the ends of the wall panels. For this purpose 115 flange-like extensions 131A are provided on the upper and central spigot members of the corner pieces 103 and similar extensions 141A are provided in the central spigot member of the front connecting member. These 120 extensions interfere with the internal webs 107 of the wall panels if the corner pieces or front connecting members are offered to the wall panels in an inverted or reversed position. Incorrect assembly is also prevented 125 in some cases by interference between the spigot members and the recesses 108 in the panels.

In use, the drawer is supplied to the customer in disassembled or knocked-down 130

condition and is erected by inserting the corner pieces 103 in the open ends of the side and back wall panels thereby joining same together at right angles to one another. The 5 inserts 136 are then fitted and thereafter the guide and bearing members 114 may be inserted in the respective tracks or channels 109 in the side walls and the drawer bottom engaged in the slots 108. The front connectors 10 are then secured to the facia panel in suitable positions corresponding to the spacing of the drawer sides and the assembly comprising the facia panel and the front connectors is then engaged with the remainder of the drawer by pushing the spigots 15 on the front connectors into the hollow ends of the side wall panels. The guide and bearing members 114 are then trapped within the tracks 109 at opposite sides of the drawer 20 but are free to slide longitudinally therealong. The assembled construction is shown in Fig. 5 of the drawings.

The drawer may then be inserted in the cabinet or the like in which it is to be housed 25 and which is first of all provided with opposed runners of the kind shown at 120 in the drawings. The drawer may be engaged with the runners by simply pushing it into the opening in the cabinet to its fully closed position, in which position the projections 125 on the guide and bearing members reach the notches 123 in the respective runners. The guide and bearing members then lock on to the associated runners and are retained 30 in position, the drawer being free to slide along the runners between the limits defined by engagement of the guide and bearing members with the inserts 135 and the front mouldings which are disposed at opposite 35 ends of the tracks 109. If it is desired to release the drawer from the cabinet the springs 118 are depressed by lifting the front of the drawer, thereby enabling the guide and bearing members to be disengaged 40 from the slots 123 whereupon the drawer can be drawn completely out of the cabinet.

The drawer is constructed to enable it to be modified for use in association with an alternative form of runner. The modified 50 runner is shown at 145 in Fig. 4K and has a vertical or mounting flange 146 enabling it to be attached to a drawer cabinet or the like in a suitable position, and a horizontal or drawer-engaging flange 147 which in use 55 extends into the track 109 through the entrance slot 110. At its forward end the vertical flange 146 is extended and carries a roller 148 rotatable about a horizontal pin 149. A modified insert 150 is used in 60 association with the runner 145 and is generally similar to that shown at 135 but has an extended body portion 151 terminating in a shoulder 152 which abuts the corner piece and limits the extent to which the 65 insert can be pushed into the opening

134 in the corner piece 130. The locking portion is provided with a detent (not shown) which engages with the holes 138 in the rear wall of the channel 109, but when the insert is in position the body portion projects to the rear of the drawer leaving a downwardly directed opening 155 forming an entrance to the channel 109. In this way the drawer may be mounted on the runners by engaging the rollers 148 with the openings 155 and pushing the drawer into the cabinet so that the roller travel along the channels 109 at opposite sides of the drawer.

A downwardly projecting lip 156 is provided at the forward end of each insert 150. This is engaged by the roller 148 when the drawer is opened and acts as a stop to prevent complete removal of the drawer from the cabinet. If required the drawer may be completely removed by lifting it slightly 80 to enable the rollers 148 at each side to clear the lips 156 on the respective inserts 150, following which the drawer can be drawn forward until the rollers are located above the openings 155, enabling the drawer to be 85 lifted clear and withdrawn from the cabinet.

In order to provide a self-closing effect a metal clip 160 locates over the horizontal web separating the hollow sections 106B and 106C of the panel at one or both sides of the drawer. The clip is provided with a slightly domed region 161 which, by interaction with the associated roller, urges the drawer towards its closed position.

It will be appreciated that the drawer 100 assembly may be utilised in association with either of the runner arrangements described without requiring any modification of the drawer itself other than the substitution of the revised corner connector fitment and 105 the use of the alternative runner. The same wall panels, front and corner connectors are used in both cases and the drawers themselves are completely interchangeable as between one system and the other.

Various modifications may be made without departing from the invention. For example the construction of the guide and bearing member may be altered and it could incorporate a fixed bearing surface of curved 115 or other form instead of rollers. If desired a plurality of such guide and bearing members could be provided at spaced intervals along the associated runner; in this event it may be possible to dispense with the rear guide 120 and bearing members. Moreover while in the arrangements described the connecting pieces are held in engagement with the panels by projecting detents engaging in holes in the panels, alternative means of securing the 125 connecting pieces may be used; for example they could be secured in place by adhesive.

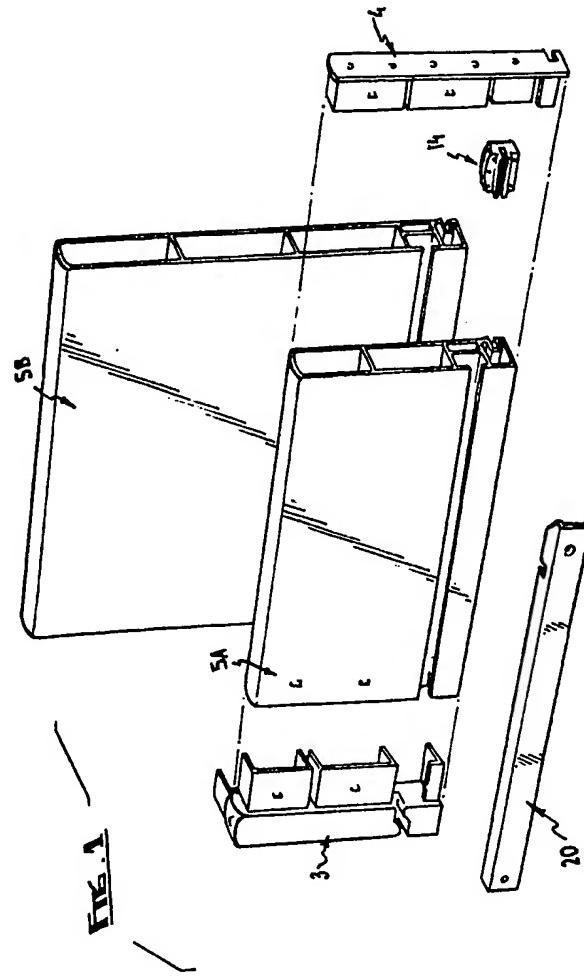
Certain features of the drawer construction described above from the subject matter of our co-pending Application Nos. 8010704, 130

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	8010848 (Serial No. 1604816, 1604817) 52309/77 (Serial No. 1604814)	
	WHAT WE CLAIM IS:—	
5	1. A drawer wall panel of hollow extruded plastics construction having a channel formed integrally therewith during extrusion and extending lengthwise of the face of the panel which is outermost in use, the channel being	
10	inset into the panel and having upper and lower longitudinally-extending flanges which project across the entrance to the channel from the opposite longitudinal edges thereof to partially close said entrance, the outer	70
15	surface of said flanges being flush with the outer face of the panel.	75
	2. A drawer wall panel according to claim 1 wherein said flanges project across the entrance to said channel by different extents.	80
20	3. A drawer wall panel, according to claim 1 or 2 wherein a slot is formed in the face of the panel opposite to that in which said channel is formed, the slot being adapted in use to receive an edge of a drawer bottom.	85
25	4. A drawer wall panel according to any of claims 1 to 3 which is provided with means enabling its attachment to adjacent wall panels to form a drawer.	90
	5. A drawer wall panel according to claim 30 4 in which said attachment means comprises apertures adjacent the opposite ends of the panel for engagement by detents carried on projecting spigot portions of connecting members adapted for engagement in the hollow ends of the panel.	95
	6. A drawer wall panel substantially as hereinbefore described with reference to Fig. 1A of the accompanying drawings.	
40	7. A drawer wall panel substantially as hereinbefore described with reference to Fig. 4A of the accompanying drawings.	
	8. A drawer having one or more walls formed from wall panels according to any preceding claim.	
35	9. A drawer assembly comprising a drawer at least the opposed side walls of which are formed from wall panels according to any of claims 1 to 7 and including a guide and bearing member located within each	
50	channel and operatively associated with a drawer runner, said guide and bearing member being moveable longitudinally of said channel but being retained against lateral withdrawal therefrom by said longitudinally extending flanges.	100
55	10. A drawer assembly according to claim 9 wherein each guide and bearing member comprises a body member having bearing means projecting from the upper surface thereof and incorporating locking means for engagement with the associated drawer runner.	105
60	11. A drawer assembly according to claim 10 wherein said locking means is operable to lock on to said drawer runner auto-	110
	matically following engagement between the drawer and the runner and closing movement of the drawer.	120
	12. A drawer assembly according to claim 10 or 11 wherein said locking means comprises an outwardly opening slot adapted to receive a flange on said drawer runner, one wall of said slot being resilient and the opposite wall being provided with a locking projection extending into the slot for engagement with a notch formed in said flange to lock the guide and bearing member in position on the runner.	125
	13. A drawer assembly according to any of claims 10 to 12 wherein said bearing means comprises a pair of rollers mounted on spaced parallel axes.	130
	14. A drawer assembly according to any of claims 10 to 12 wherein said bearing means comprises a fixed bearing surface.	
	15. A drawer assembly according to any of claims 10 to 14 wherein projecting pins are provided on one or more surfaces of said body member to reduce frictional resistance arising from contact of said surfaces of the body member with adjacent surfaces of the associated channel.	
	16. A drawer assembly according to any of claims 10 to 15 incorporating biasing means acting to urge said body member in a direction away from the inner or rear wall of said channel.	
	17. A drawer assembly according to claim 16 wherein said biasing means comprises a leaf spring carried by the wall of said body member opposite to that from which said slot opens for abutment with the inner or rear wall of the channel.	140
	18. A drawer assembly according to any of claims 9 to 17 wherein each guide and bearing member is carried by the forward end of the associated runner, a rear guide and bearing member being provided at the rear end of each channel for sliding engagement with the associated runner to support and guide the rear end of the drawer during opening and closing movement thereof.	145
	19. A drawer assembly according to claim 18 wherein each side wall of the drawer is connected to the drawer back wall by a connecting member comprising a corner post having spigots projecting therefrom in two directions at right angles to one another and dimensioned to be received in the adjacent ends of the side and back walls, said rear guide and bearing members being associated with said corner posts.	150
	20. A drawer assembly according to claim 19 wherein each rear guide and bearing member comprises an insert adapted to be removeably mounted at the rear end of the associated channel.	155
	21. A drawer assembly according to claim 20 wherein said insert is adapted to be located in position by locking means engageable	160

- with complementary locking means on the associated wall panel.
22. A drawer assembly according to claim 21 wherein said complementary locking means comprises an aperture formed in the inner or rear wall of each of said channels and said locking means comprises a detent carried on a projecting part of the associated rear guide and bearing member.
- 10 23. A drawer assembly according to any of claims 20 to 22 wherein each of said channels is adapted to receive any one of a plurality of interchangeable drawer runners of different form, there being a plurality of alternatively useable guide and bearing members adapted to slidably support and guide the rear end of the drawer on the respective form of runner.
- 20 24. A drawer assembly according to any of claims 19 to 23 wherein the or one form of the rear guide and bearing member is disposed in vertical alignment with the associated corner post.
- 25 25. A drawer assembly according to any of claims 19 to 23 wherein the or one form of the rear guide and bearing member is displaced rearwardly from the associated corner post.
- 30 26. A drawer assembly according to claim 25 including a downwardly directed opening between each of said guide and bearing members and the associated corner post, the opening being dimensioned to permit entry of a roller or rollers carried by the associated drawer runner into the associated channel from the rear end thereof.
- 35 27. A drawer assembly according to any of claims 18 to 26 wherein each of said rear guide and bearing members comprises opposed fixed bearing surfaces.
- 40 28. A drawer assembly according to any of claims 18 to 26 wherein each of said rear guide and bearing members comprises opposed roller members.
- 45 29. A drawer assembly according to any of claims 18 to 28 wherein each of said rear
- guide and bearing members incorporates a spring tongue serving to engage with the drawer runner and assist in accommodating differences in tolerance of the components introduced during manufacture.
30. A drawer assembly according to any of claims 9—29 wherein the drawer front and side walls are interconnected by front connectors each having a generally flat face plate for abutment with the rear face of the drawer front and projecting spigot members extending at right angles to the face plate and adapted for engagement in openings in the forward ends of the associated side walls.
31. A drawer assembly according to claim 30 wherein a raised rim is formed on at least a portion of said face plate to provide a clearance between the flat surface of the face plate and the adjacent surface of the drawer front to ensure correct seating of the front connector.
32. A drawer assembly according to claim 31 wherein said raised rim extends round the entire periphery of the face plate.
33. A drawer assembly substantially as hereinbefore described with reference to Figs. 1A to 1D and Fig. 1F of the accompanying drawings.
34. A drawer assembly substantially as hereinbefore described with reference to Fig. 3 of the accompanying drawings.
35. A drawer assembly substantially as hereinbefore described with reference to Figs. 4A to 4H and Fig. 5 of the accompanying drawings.
36. A drawer assembly substantially as hereinbefore described with reference to Figs. 4A, 4D, 4E, 4G, 4H, 4K, 4L and Fig. 6 of the accompanying drawings.
37. An article of furniture incorporating one or more drawer assemblies according to any preceding claim.

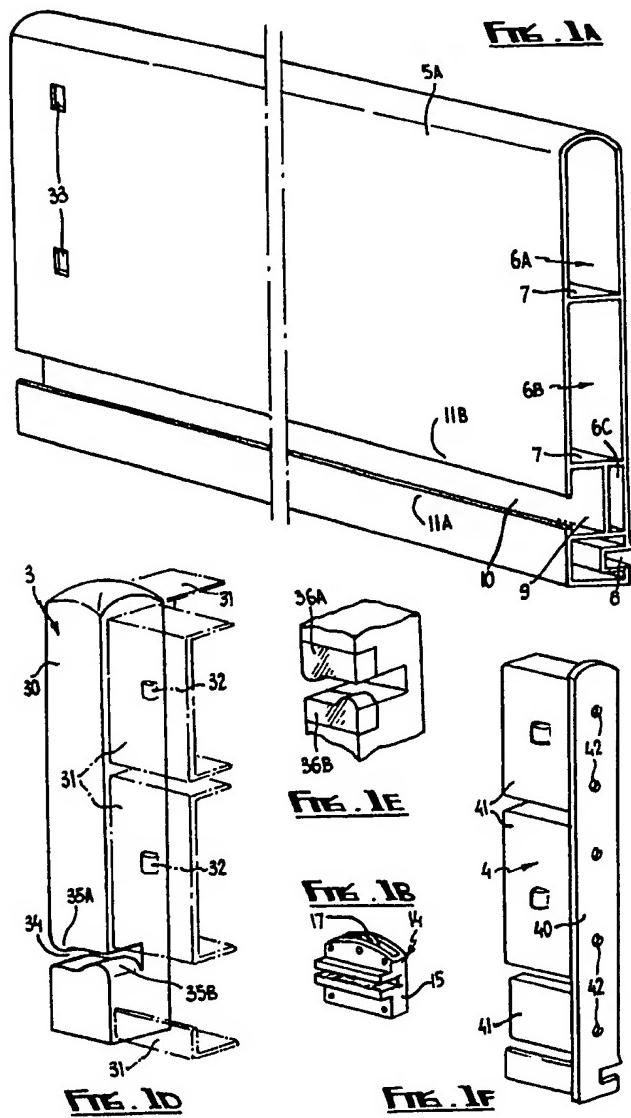
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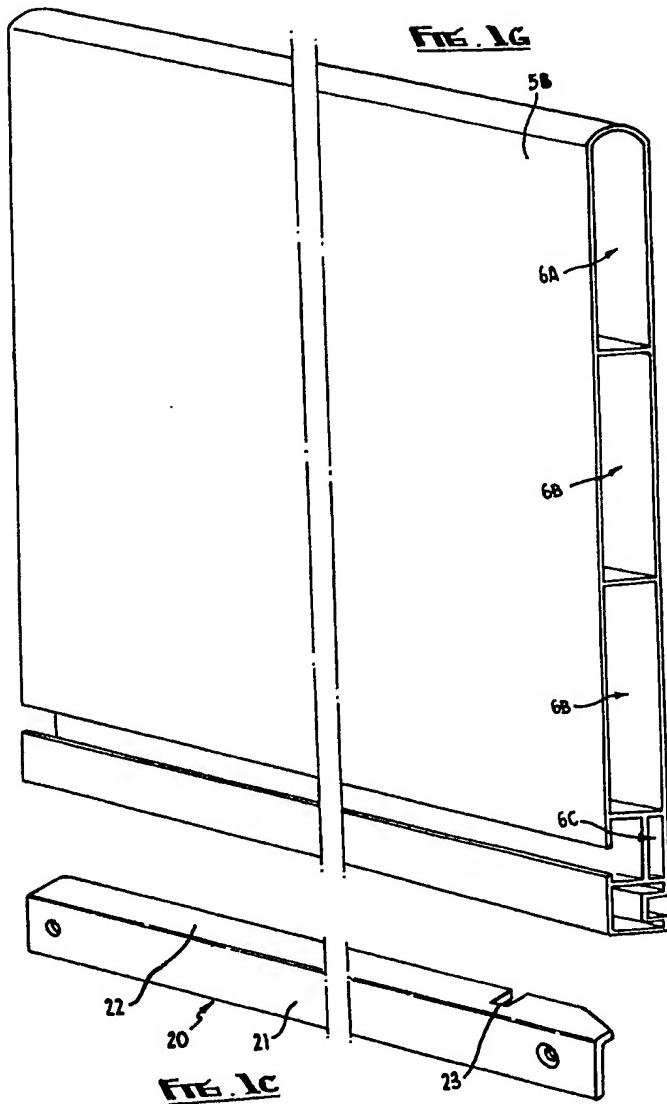


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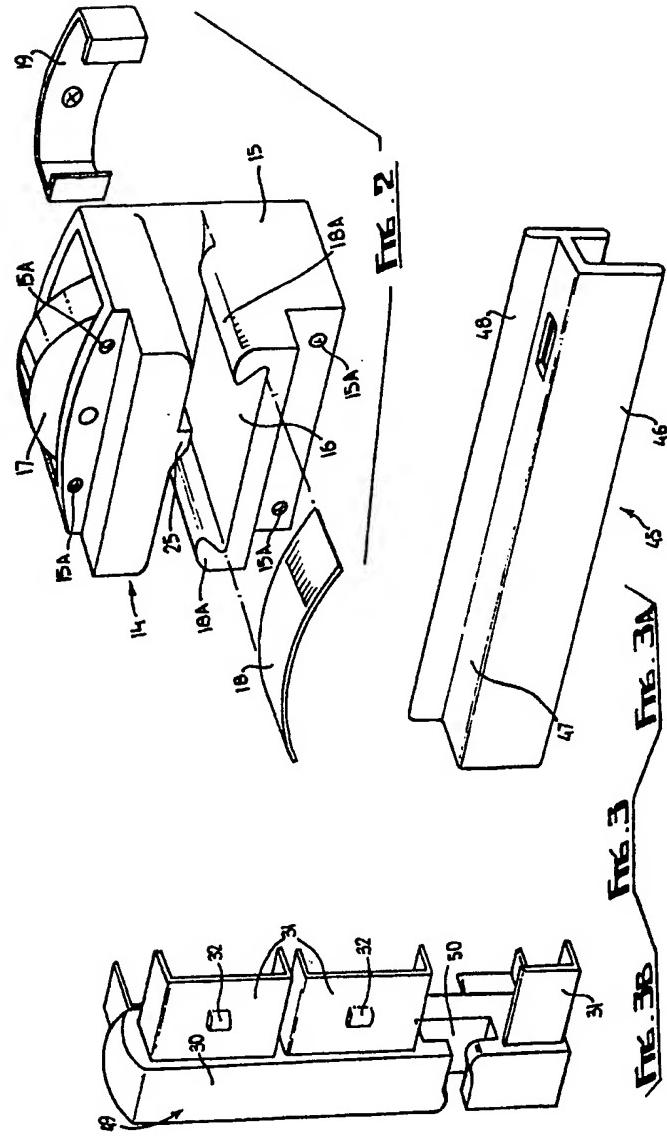
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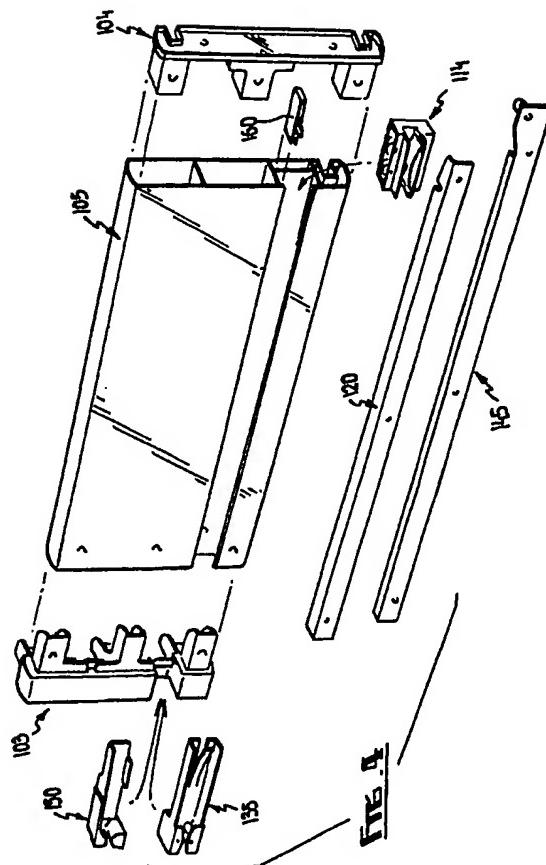


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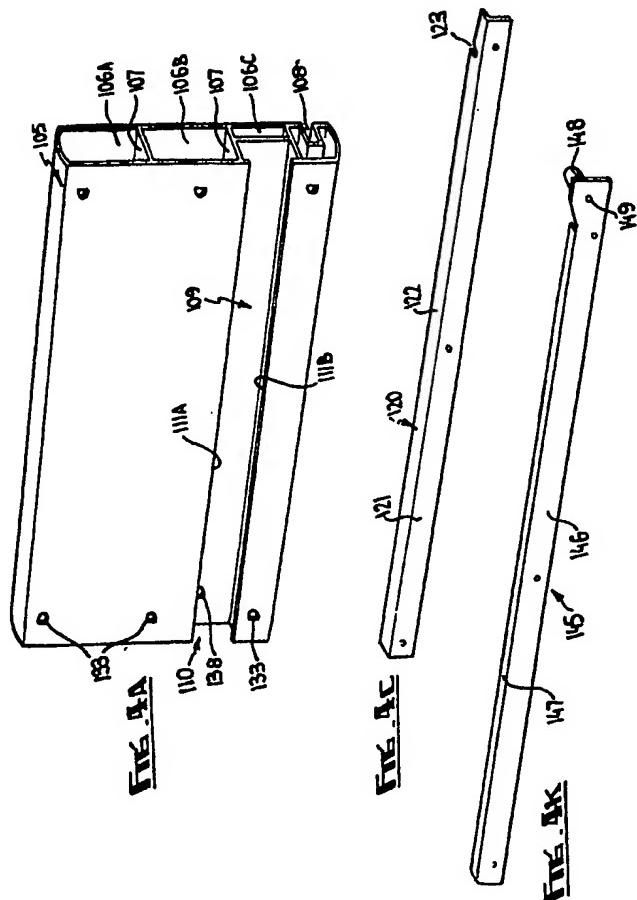
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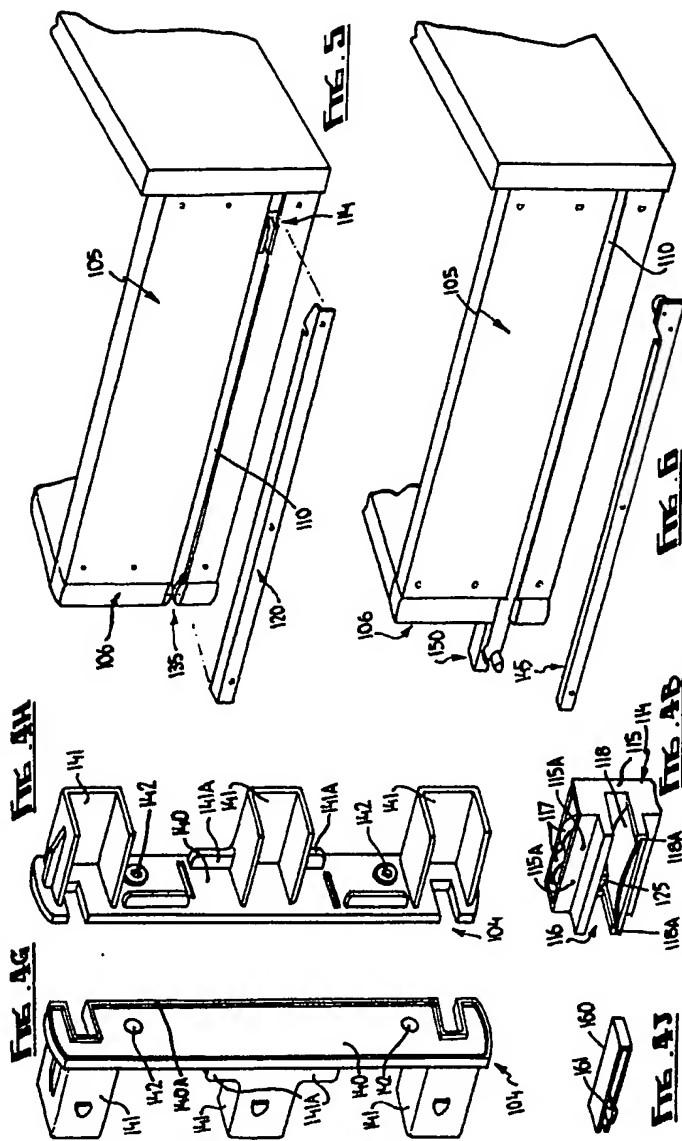
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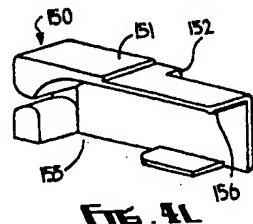


FIG. 4L

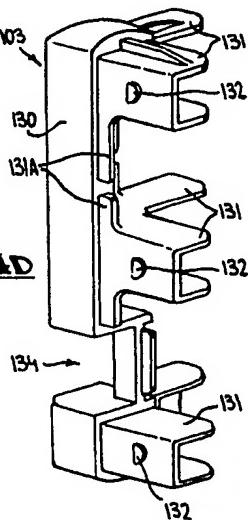


FIG. 4D

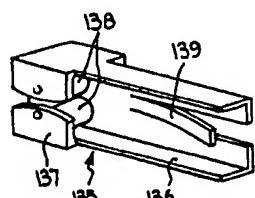


FIG. 4F

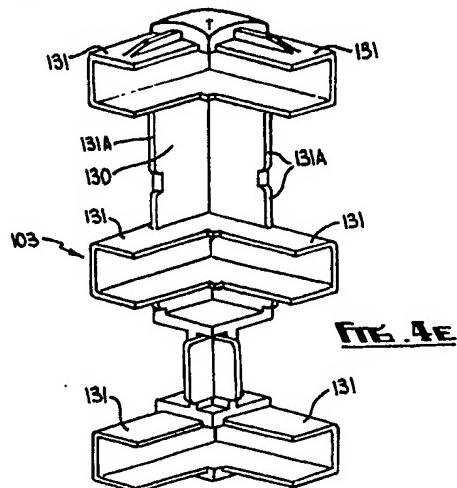


FIG. 4E